

# DOUBLE-EXCITATION ROTATING ELECTRICAL MACHINE FOR ADJUSTABLE DEFLUXING

## ABSTRACT

The invention concerns a rotating electrical machine comprising a stator enclosing a rotor including permanent excitation magnets (20, 24, 26, 30) capable of producing magnetic fluxes, and excitation coils (22, 28), capable of being excited or not and generating flux constituents which can counter the fluxes generated in the magnets, wherein the number ( $N_a$ ) of magnets and the number ( $N_b$ ) of excitation coils as well as the mutual arrangement of the coils and the magnets relative to one another from an elementary pattern ( $m_e$ ), said numbers  $N_a$  of magnets,  $N_b$  of coils and  $N_{me}$  of elementary patterns capable of being modified depending on the desired basic intensity ( $I_{base}$ ) in the machine, said basic intensity being determined when the coils are not excited and on the desired modulation intensity ( $I_{mod}$ ) in the machine, said modulation intensity being determined when the coils are excited.

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